

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/788,979	02/27/2004		Wolfgang Aderhold	008304	6862	
7590 01/26/2006				EXAMINER		
Applied Mate		FUQUA, SHAWNTINA T				
Patent/Legal D M/S 2061	ept.			ART UNIT	PAPER NUMBER	
P.O. Box 450A		ř	3742	3742		
Santa Clara, CA 95052				DATE MAILED: 01/26/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	on No.	Applicant(s)				
		10/788,97		ADERHOLD ET AL.				
	Office Action Summary	Examiner	3	Art Unit				
	•	Shawntina	T Fugus	3742				
	- The MAILING DATE of this communication ap		•		ress			
Period fo		•						
THE N - Extensafter S - If the I - If NO - Failure Any re	DRTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. sions of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a rep period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statute the ply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	136(a). In no eve ply within the statu d will apply and wil te, cause the appli	int, however, may a reply be time story minimum of thirty (30) days I expire SIX (6) MONTHS from ication to become ABANDONE	nely filed s will be considered timely. the mailing date of this com D (35 U.S.C. § 133).	nmunication.			
Status								
1)⊠	Responsive to communication(s) filed on 24 (	October 2005	<u>5</u> .					
2a)⊠	This action is <b>FINAL</b> . 2b)☐ Thi	is action is no	on-final.					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
	on of Claims							
4)🖂	Claim(s) <u>1-29</u> is/are pending in the application	n.						
	4a) Of the above claim(s) is/are withdrawn from consideration.							
5)	Claim(s) is/are allowed.							
6)⊠	Claim(s) <u>1-29</u> is/are rejected.							
7)	Claim(s) is/are objected to.							
8) 🗌	Claim(s) are subject to restriction and/	or election re	equirement.					
Application	on Papers							
9)□ 1	The specification is objected to by the Examin	ier.						
	The drawing(s) filed on <u>27 February 2004</u> is/are: a) $\boxtimes$ accepted or b) $\square$ objected to by the Examiner.							
	Applicant may not request that any objection to the	e drawing(s) b	e held in abeyance. See	e 37 CFR 1.85(a).				
	Replacement drawing sheet(s) including the correct	•	• • • •		• •			
11)∐ 1	The oath or declaration is objected to by the E	xaminer. No	te the attached Office	Action or form PTC	D-152.			
Priority u	nder 35 U.S.C. § 119							
12) 🗌 A	Acknowledgment is made of a claim for foreign	n priority und	ler 35 U.S.C. § 119(a)	-(d) or (f).				
	☐ All b)☐ Some * c)☐ None of:	, ,	• ,	( ) ( )				
	1. Certified copies of the priority documen	nts have beer	n received.					
:	2. Certified copies of the priority documen	nts have beer	received in Application	on No				
;	<ol><li>Copies of the certified copies of the price</li></ol>	ority docume	nts have been receive	ed in this National S	tage			
	application from the International Burea	•	* **					
* S	ee the attached detailed Office action for a list	t of the certif	ied copies not receive	d.				
Attacher 4	(e)							
Attachment( 1) Notice	e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)				
2) 🔲 Notice	of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Da	ite				
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 No(s)/Mail Date	3)	5) Notice of Informal P	atent Application (PTO-	152)			

### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

- 1. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 2. Claims 15-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 15-19 depend from canceled claim 11. For purposes of examination, Examiner assumes claims 15-19 to depend from independent claim 12.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 3, 6-8, 20, 22, 23, 25-26, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samoilov (US6455814)

Samoilov et al discloses a thermal processing apparatus/method comprising a radiant heat source (102), disposing a substrate to be thermally processed on a front side to form features therein with a back side facing a radiant heat source, thermally monitoring (118) the front side of wafer, peripherally supporting the substrate, substrate is disposed with the front side facing upwardly, reflecting heat emitted from the front side of substrate back to the front side, front side

Application/Control Number: 10/788,979

Art Unit: 3742

facing generally horizontal reflector (122) above the radiant heat source (Figure 1), radiant heat source is below reflector, and substrate is held between reflector and radiant heat source with a processing side facing reflector (column 2, lines 41-47, column 3, lines 15-31, 45-51, 58-60, Figures 1-3).

Page 3

Samoilov discloses the claimed invention except for a front side of substrate facing downwardly. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included facing the front side of the substrate down, since it has been held that a mere reversal of essential working parts of a device involves only routine skill in the art.

5. Claims 2, 4-5, 9, and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samoilov et al as applied to claims 1, 3, 8 above, and further in view of Balance et al (US6090210).

Samoilov et al discloses all of the recited subject matter except thermally monitoring temperature with a plurality of radial positions, a ring support, an edge exclusion zone with a width of no more than 3 mm, and a detachable holding member capable of holding substrate from a top side. Ballance et al discloses thermally monitoring temperature at a plurality of radial positions (column 4, lines 25-31), and a ring support (18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a plurality of temperature sensors and ring support of Ballance et al in the apparatus/method of Samoilov et al because, a plurality of temperature sensors allows for a more uniform temperature and a ring support holds the substrate more securely.

Samoilov et al in view of Ballance et al discloses all of the recited subject matter except an edge zone no greater than 3 mm. An edge zone no greater than 3 mm is conventional and well known in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included an edge zone no greater than 3 mm as a means to allow most of the substrate to be exposed.

### Response to Arguments

6. Applicant's arguments with respect to claims 1-9, 12-20, 22-23, 25-26, and 28-29 have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Application/Control Number: 10/788,979 Page 5

Art Unit: 3742

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawntina T. Fuqua whose telephone number is (571) 272-4779. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (571) 272-4777. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

stf Jnauary 23, 2006 Shawntina Fuqua Patent Examiner Art Unit 3742